

REMARKS

Claims 1-20 are pending this application. Claims 1 and 11 have been amended. No new matter has been added.

Claim Rejections under 35 U.S.C. §103

Claims 1-20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over the admitted prior art, in view of Suzuki et al., U.S. Patent No. 5,786,852, in view of Parulski et al., U.S. Patent No. 5,668,897, and further in view of Kato, U.S. Patent No. 6,148,031. Reconsideration and reexamination of the rejection is respectfully requested.

The record of the Examiner's and Applicants' positions with respect to the rejections and interpretations of the references are well established. Accordingly, Applicants incorporate by reference the remarks of the previously filed amendment and respond to the new issues raised in the outstanding Office Action and the amendments made to the claims as presented herein.

Independent claims 1 and 11 set forth that the photoelectric sensor is of the interlace type having pixels arranged in the vertical and horizontal directions. The claims have been further amended to set forth that the effective pixel number of the photo electric sensor in a vertical direction is twice or more than an effective number of scanning lines in a television signal standard. The pixel signals accumulated in each of the pixels are outputted with interlace by subsampling the pixel signals for every one line in a first signal read mode, and a sum of the pixel signals in the two pixels adjoining each other in the vertical direction. As

amended, each of the independent claims sets forth that the combination of two pixels adjoining each other in the vertical direction in a second signal read mode are the same every time when a sum of the pixel signals are outputted. Support for the amendments can be found in claims 4 and 19, which have been canceled without prejudice or disclaimer, and in the specification at page 4, line 23 - page 5, line 9 and page 10, lines 8-25, for example.

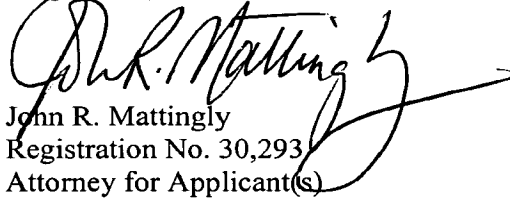
The Examiner takes the position that Suzuki discloses that the photoelectric sensor can be operated either as an interlace image sensor or a non-interlace image sensor. In particular, Suzuki discloses that in a field reading mode (referred to also as a field mode), signals of all pixels are acquired into the vertical transfer part, signals of two pixels adjacent in the vertical direction are added together, and the resultant signals are transferred in the vertical transfer part. On the other hand, in a frame reading mode (referred to also as a frame mode), signals of pixels on odd numbered lines and those on even numbered lines are transferred separately to the vertical transfer part.

The Office Action alleges that Suzuki discloses that pixel signals are outputted with non-interlace in a moving picture mode, however, Applicants respectfully traverse the assertion. Suzuki outputs signals of different lines alternately each time. Therefore, Suzuki does not disclose non-interlace outputting but rather interlace outputting. Accordingly, the rejection of claims 1-20 under 35 U.S.C. §103(a) as being unpatentable over the admitted prior art, in view of Suzuki et al., U.S. Patent No. 5,786,852, in view of Parulski et al., U.S. Patent No. 5,668,897, and further in view of Kato, U.S. Patent No. 6,148,031 should be withdrawn.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants contend that the above-identified application is now in condition for allowance. Accordingly, reconsideration and reexamination is requested.

Respectfully submitted,



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